

NATURAL RESOURCES DEFENSE	)	
COUNCIL, INC., BEATRICE HOLT,	)	
and SHEILA HOLT-ORSTED,	)	
	)	
Plaintiffs,	)	
	)	
v.	)	No.: 3:08-cv-00229
	)	Chief Judge Campbell
COUNTY OF DICKSON, TENNESSEE,	)	Magistrate Judge John S. Bryant
CITY OF DICKSON, TENNESSEE,	)	
ALP LIGHTING AND CEILING	)	
PRODUCTS, INC., NEMAK USA, INC.,	)	
and INTERSTATE PACKAGING	)	
COMPANY,	)	
	)	
Defendants.	)	

1. This case is brought to abate the imminent and substantial endangerment to human health and the environment posed by trichloroethylene (“TCE”) and perchloroethylene (“PCE”) disposed at the Dickson Landfill, in Dickson, Tennessee. TCE and PCE were once commonly used as industrial solvents and degreasers. For decades, industrial and other hazardous and solid wastes including TCE and PCE were dumped at the Landfill. Those wastes did not stay put.

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fishing stream and a major source of drinking water for the Water Authority of Dickson County. Several square miles of Dickson County have been recognized as an “imminent threat” area by the County. TCE contamination above drinking water limits, and orders of magnitude above United States Environmental Protection Agency (“EPA”) drinking water screening levels, has been found in at least two wells even outside that threat area. In some areas, this contamination appears to be worsening.

3. Although sweet to the smell and colorless to sight, TCE and PCE are toxic. Exposure to TCE has been linked to nervous system impairment; liver and lung damage; abnormal heartbeat; low birth weight, congenital heart defects, orofacial defects, and other developmental harms; and comas. Exposure to PCE can cause nervous system impairment, liver damage, kidney damage, comas, and reproductive system harm. TCE and PCE are also likely human carcinogens. At sufficient exposure levels, TCE and PCE cause death.

4. Defendants in this case, the Landfill’s owners and operators and the owners of local industrial facilities that disposed of TCE and/or PCE at the Landfill, have not taken steps necessary to protect health and the environment from the contamination emanating from the site. More than two decades after TCE was first detected in nearby drinking water sources, Defendants have not fully characterized the present and likely future extent of the TCE and PCE contamination. Defendants have not contained the contamination’s continued migration.

Defendants have, instead, effectively surrendered the soil and ground and surface water of Dickson County to the slow spread of these invisible and toxic chemicals.

5. Section 7002(a)(1)(B) of the Resource Conservation and Recovery Act (“RCRA”), 42 U.S.C. § 6972(a)(1)(B), authorizes private persons to sue those responsible for such contamination to compel a comprehensive investigation and cleanup. Defendants City of Dickson, Tennessee and County of Dickson, Tennessee own and operate the Landfill, and are responsible for its management. Defendants ALP Lighting and Ceiling Products, Inc. (“A.L.P.”), Nemak USA, Inc. (“Nemak”), and Interstate Packaging Company (“Interstate”) own industrial facilities in the Dickson area that generated TCE and/or PCE wastes, some of which were disposed at the Landfill. Each Defendant has contributed to the disposal and management of TCE- and/or PCE- contaminated waste that may present an imminent and substantial endangerment to human health and the environment of Dickson County.

6. Plaintiff Beatrice Holt owns and resides on a property adjacent to the Landfill (the “Holt property”) that is contaminated with TCE and a chemical degradate of TCE and PCE. Plaintiff Sheila Holt-Orsted, Beatrice Holt’s daughter, resided at the Holt property for many years and continues to spend substantial time there. Plaintiff Natural Resources Defense Council, Inc. is a non-profit environmental organization with members throughout the United States, including in Dickson County. Through this suit, Plaintiffs seek to compel Defendants to investigate and characterize fully the spread of TCE and PCE contamination from

the Landfill, to restore the waters and lands of Dickson County that have been polluted by this contamination, and to protect the health of Dickson County's residents and environment.

## **JURISDICTION AND VENUE**

7. This Court has jurisdiction over the subject matter of this action pursuant to RCRA, 42 U.S.C. § 6972(a), and the federal question statute, 28 U.S.C. § 1331. This action arises under RCRA, 42 U.S.C. §§ 6901 *et seq.*, which is a federal law. This Court may award Plaintiffs all necessary injunctive relief pursuant to RCRA, 42 U.S.C. § 6972(a), and may award declaratory relief pursuant to the Declaratory Judgment Act, 28 U.S.C. §§ 2201-02.

8. Defendants City of Dickson, Tennessee ("City") and County of Dickson, Tennessee ("County") first received notice of the endangerment over which Plaintiffs now sue on or by July 17, 2007. A copy of Plaintiffs' original notice letter to the City and County, dated June 26, 2007, is attached to this First Amended Complaint (without the letter's exhibits) as Exhibit A and incorporated herein by reference. Plaintiffs mailed copies of the notice letter to the Administrator of the EPA and the EPA Regional Administrator for the region encompassing this judicial district, the United States Attorney General, the Commissioner of the Tennessee Department of Environment and Conservation ("TDEC"), the Director of the TDEC Division of Solid and Hazardous Waste Management ("DSWM"), and the Tennessee Attorney General, all of whom received notice on or by July 10, 2007.

9. Defendants City and County received supplemental notice of the endangerment over which Plaintiffs now sue on or by April 28, 2009. A copy of Plaintiffs' supplemental notice letter to the City and County, dated April 3, 2009, is attached to this First Amended Complaint (without the letter's exhibits) as Exhibit B and incorporated herein by reference. Plaintiffs mailed copies of the April 3, 2009 notice letter to the Administrator of the EPA and the EPA Regional Administrator for the region encompassing this judicial district, the Commissioner of TDEC, and the Director of TDEC DSWM, all of whom received notice on or by April 14, 2009.

10. Defendants A.L.P., Interstate, and Nemak first received notice of the endangerment over which Plaintiffs now sue on or by March 4, 2009. A copy of Plaintiffs' original notice letter to A.L.P., Interstate and Nemak, dated February 26, 2009, is attached to this First Amended Complaint (without the letter's exhibits) as Exhibit C and incorporated herein by reference. Plaintiffs mailed copies of the February 26, 2009 notice letter to the Administrator of the EPA and the EPA Regional Administrator for the region encompassing this judicial district, the Commissioner of TDEC, and the Director of TDEC DSWM, all of whom received notice on or by March 5, 2009.

11. Defendant Interstate received supplemental notice of the endangerment over which Plaintiffs now sue on or by April 6, 2009. A copy of Plaintiffs' supplemental notice letter to Interstate, dated April 3, 2009, is attached to this First Amended Complaint (without the letter's exhibits) as Exhibit D and incorporated herein by reference. Plaintiffs mailed copies of the April 3, 2009 notice

letter to the Administrator of the EPA and the EPA Regional Administrator for the region encompassing this judicial district, the Commissioner of TDEC, and the Director of TDEC DSWM, all of whom received notice on or by April 14, 2009

12. Venue is proper in this judicial district under 28 U.S.C. § 1391(b)(2), because a substantial part of the events or omissions giving rise to Plaintiffs' claims occurred in this judicial district and the property that is the subject of the action is located in this judicial district. Venue is proper under RCRA, 42 U.S.C. § 6972(a), because the alleged endangerment occurred or may occur in this judicial district.

### **PARTIES**

13. Defendant City owns and has owned portions of the land underlying the Landfill. The City operated the Landfill from as early as the late 1950s through October 10, 2001. Between August 25, 1972 and October 10, 2001, the City was party to an agreement with the County that provided for the City and County to jointly operate the Landfill. In October 2001, the City agreed to accept all leachate generated by the Landfill for disposal to the City's sanitary sewer system and treatment by the City's wastewater treatment plant.

14. Defendant County owns and has owned portions of the land underlying the Landfill. The County has operated the Landfill since at least August 25, 1972.

15. Defendant A.L.P. is an international manufacturer of lighting components, founded in 1972 and headquartered at 6333 Gross Point Road, Niles, IL 60714. Since 1985, A.L.P. (or its subsidiary and/or predecessor in interest, whose environmental liability's A.L.P. has acquired) has operated a manufacturing facility

for lighting components (the “A.L.P. facility” or “facility”) in Dickson. This facility is located at One Gum Branch Road in Dickson, Tennessee. The A.L.P. facility has generated wastes containing TCE and PCE and disposed of those wastes at the Landfill.

16. Defendant Interstate is a corporation registered with the Tennessee Secretary of State as the “Interstate Packaging Company,” I.D. No. 0016200, and incorporated in Tennessee. Interstate was formed in 1969. Interstate has its principal office and production facility at 2285 Highway 47 N., White Bluff, Dickson County, Tennessee. Interstate’s production facilities have been located in White Bluff, Dickson County, Tennessee since at least the first half of the 1970s.

17. Defendant Nemak is a corporation organized under the laws of the State of Delaware. Nemak owns and operates an aluminum foundry (the “Nemak foundry” or “foundry”) located at 1635 Old Columbia Road in Dickson, Tennessee. The Nemak foundry has generated wastes containing PCE and disposed of those wastes at the Landfill.

18. Plaintiff Beatrice Holt owns and resides at the Holt property on 340 Eno Road, which is located just across a local road from the Landfill at the Landfill’s southeast corner. Beatrice Holt has resided at the Holt property since 1973 and resided at an adjacent property from 1961 through 1973. From at least 1973 until 2000, Beatrice Holt relied on water drawn from private wells on the Holt property, located approximately 300 feet from the Landfill boundary, for domestic purposes including drinking, cooking, bathing, and cleaning.

19. Plaintiff Sheila Holt-Orsted, Beatrice Holt's daughter, resided at the Holt property for many years (including from 1973 to 1980 and at various times between the mid 1990s and early 2007) and resided at an adjacent property from 1961 to 1973 and from 1989 to 1993. Sheila Holt-Orsted continues to spend a significant amount of time, including holiday periods, living at the Holt property. From at least 1973 until 2000, during those periods when she resided or lived at the Holt property, Sheila Holt-Orsted relied on water drawn from private wells on the Holt property, located approximately 300 feet from the Landfill boundary, for domestic purposes including drinking, cooking, bathing, and cleaning.

20. The well water on the Holt property became contaminated with TCE as the result of the migration of TCE and/or PCE and these chemicals' degradation products from TCE- and/or PCE- contaminated wastes disposed at the Landfill. In 1988, an EPA sample revealed TCE contamination at not less than 3.5 parts per billion ("ppb") in a well known as the "Harry Holt well." Since that time, well water from the Holt property has exceeded 100 ppb TCE on multiple occasions. Well water from the Holt property has also been contaminated with *cis*-1,2-dichloroethylene ("*cis*-1,2-DCE"), a TCE degradation product.

21. Due to the contamination of their well water, the Holts have paid for water deliveries since October 2000. The Holts presently pay for water delivered by the Water Authority of Dickson County.

22. The Holts and members of their immediate and extended families have experienced serious health problems that they reasonably believe are related to

their long-term exposure to contamination from the Landfill. Beatrice Holt's husband and Sheila Holt-Orsted's father, Harry Holt, who lived at the Holt property and drank from the Harry Holt well, died of cancer in January 2007. Sheila Holt-Orsted suffers from breast cancer, diagnosed in April 2003. Beatrice Holt suffers from cervical polyps, diagnosed in September 2002. Other members of the extended family who have lived at the Holt property, including Sheila Holt-Orsted's daughter and Beatrice Holt's other children and grandchildren, suffer from other health disorders. The Holts have been and will continue to be injured due to contamination from the Landfill until Defendants are compelled to assess and eliminate that contamination.

23. Plaintiff Natural Resources Defense Council, Inc. ("NRDC") is a not-for-profit membership corporation founded in 1970 and organized under the laws of the State of New York. NRDC maintains offices in New York, NY; Washington, DC; Chicago, IL; San Francisco and Santa Monica, CA; and Beijing, China. NRDC has more than 440,000 members nationwide, including more than 4,000 members who live in the State of Tennessee. NRDC's purposes include the preservation, protection, and defense of the environment, public health, and natural resources. For nearly forty years, NRDC has engaged in scientific analysis, public education, advocacy, and litigation on a wide range of environmental and health issues. NRDC has long been active in efforts to reduce the threats to human health and environment from toxic chemicals, including TCE.

24. Approximately twenty NRDC members live in Dickson County, Tennessee. Some of these members live in proximity to the Landfill. NRDC members who live in Dickson County drink, cook, bathe, wash dishes and garden with water from sources, including private wells, threatened by contamination from the Landfill. NRDC members who live in Dickson County reasonably believe that contamination from the Landfill may endanger their health, the health of their families and communities, and the environment. NRDC members have been and will continue to be injured by contamination from the Landfill until Defendants are compelled to characterize and remedy that contamination.

## **FACTUAL BACKGROUND**

### **A. The Hazards of TCE, PCE and Their Degradation Products**

25. TCE, PCE and the chemicals into which TCE and PCE degrade (“degradation products”) are extremely hazardous and potentially lethal to humans and other organisms.

26. TCE is a colorless liquid with a somewhat sweet odor and a sweet, burning taste. It is most commonly used as an industrial solvent and degreaser for metal parts, but is also used in other chemical products including paint removers, adhesives, and spot removers. TCE is classified as a volatile organic compound (“VOC”).

27. TCE harms the human heart, lungs, kidneys, liver, immune system, nervous system, and reproductive system. TCE is also associated with developmental harm, including low birth weight, congenital heart defects, and

orofacial defects. The National Toxicology Program (“NTP”) has determined that TCE is “reasonably anticipated to be a human carcinogen.” The International Agency for Research on Cancer (“IARC”) has determined that TCE is “probably carcinogenic to humans.” The Centers for Disease Control (“CDC”) has linked TCE to orofacial defects, including cleft lip and cleft palate. The Agency for Toxic Substances and Disease Registry (“ATSDR”), the public health agency of the U.S. Department of Health and Human Services (“DHHS”), has found that drinking or breathing high levels of TCE may cause adverse nervous system effects, liver and lung damage, abnormal heartbeat, coma, and possibly death.

28. PCE is a colorless liquid with a sweet, ether-like odor. It is most commonly used as a degreaser for metal parts and in dry cleaning, but is also used in other chemical products including paint removers, printing inks, adhesive formulations, paper coatings, and in aerosol formulations. Like TCE, PCE is classified as a VOC.

29. Exposure to PCE can cause nervous system impairment, liver damage, kidney damage, comas, and adverse reproductive system effects including spontaneous abortion and reduced fertility. PCE has also been linked to adverse developmental effects such as orofacial defects. DHHS has determined that PCE “may reasonably be anticipated to be a human carcinogen.” IARC has determined that PCE is “probably carcinogenic to humans.” ATSDR has found that drinking or breathing high levels of PCE may cause adverse nervous system effects, liver and

kidney damage, coma, adverse reproductive effects, developmental harm, and possibly death.

30. Humans may become exposed to TCE and PCE by drinking, bathing, or swimming in contaminated water; by skin contact, including contact with TCE- or PCE contaminated soil; or by breathing TCE or PCE vapors. Wildlife may become exposed to TCE or PCE when these chemicals are present in their natural habitat.

31. TCE and PCE are dense non-aqueous phase liquid (“DNAPL”) contaminants, because they are denser than water in their liquid form. This property makes TCE and PCE likely to sink to and pool at the bottoms of water bodies, to accumulate on impermeable and semi-impermeable soil and bedrock layers, and to flow quickly through groundwater and pollute wells and springs fed by groundwater. Because of TCE’s and PCE’s chemical and physical properties, local karst geologic conditions, and variation in weather conditions, it is not unusual for sampling results for individual wells, springs, or surface waters to vary from sample to sample. The failure to detect TCE or PCE in any one sample, on any one date, cannot establish that the groundwater in the vicinity of the sampling point is free of TCE or PCE contamination.

32. TCE and PCE also adhere to soil particles and sediments.

33. TCE and PCE can vaporize when water or soil in which they are contained is exposed to the air at the ground surface and in soil gas.

34. TCE and PCE may persist in groundwater, sediments, and soils for long periods of time.

35. PCE can degrade in subsurface groundwater into TCE. TCE, in turn, can degrade into other VOCs. TCE's degradation products include vinyl chloride ("VC"), otherwise known as chloroethene, chloroethylene, and ethylene monochloride, as well as several forms of dichloroethylene ("DCE"), including 1,1-dichloroethylene ("1,1-DCE"), also known as 1,1-dichloroethene or vinylidene chloride; *cis*-1,2-dichloroethylene ("*cis*-1,2-DCE"), also known as *cis*-1,2-dichloroethene; and *trans*-1,2-dichloroethylene ("*trans*-1,2-DCE"), also known as *trans*-1,2-dichloroethene.

36. The detection of one or more of the chemicals PCE, TCE, DCE, and/or VC in a water body will often indicate that one or more of the other chemicals, or degradation products, are also present in that water body.

37. 1,1-DCE is a colorless liquid. 1,1-DCE breaks down very slowly in water, can vaporize from water or soil into air and soil gas, and can contaminate groundwater. 1,1-DCE has been linked to nervous system, liver, lung, and kidney damage, as well as birth defects. EPA has identified 1,1-DCE as a possible human carcinogen.

38. 1,2-DCE is a colorless liquid. Two forms of DCE, *cis*-1,2-DCE and *trans*-1,2-DCE, can vaporize into air and soil gas, can travel through soil or dissolve in water in soil, and can contaminate groundwater. *Trans*-1,2-DCE has been linked

to liver, lung, and heart damage, as well as death. *Cis*-1,2-DCE has been linked to adverse liver effects and death.

39. VC is sweet-smelling, colorless as a gas, can vaporize from water or soil into air and soil gas, and can contaminate groundwater. VC can damage the liver, immune and nervous systems and cause death, and has been associated with developmental harm. The Department of Health and Human Services has determined that VC is a “known carcinogen.”

40. Humans and wildlife may become exposed to 1,1-DCE, *cis*-1,2-DCE, *trans*-1,2-DCE, and VC by drinking contaminated water, breathing vapors, or through skin contact.

41. PCE, TCE and these chemicals’ degradation products (including 1,1-DCE, *cis*-1,2-DCE, *trans*-1,2-DCE, and VC) are regulated as hazardous substances under RCRA, 40 C.F.R. § 261.33(f) (Table listing PCE at U210, 1,1-DCE at U078, 1,2-DCE at U079, TCE at U228, and VC at U043); as drinking water contaminants under the Safe Drinking Water Act, 42 U.S.C. §§ 300f *et seq.*, and implementing regulations, 40 C.F.R. § 141.50(a) (PCE, VC, 1,1-DCE, *cis*-1,2-DCE, *trans*-1,2-DCE, and TCE), § 141.61(a) (PCE, VC, 1,1-DCE, *cis*-1,2-DCE, *trans*-1,2-DCE, and TCE); and as toxic substances under the State of Tennessee’s Water Quality Control Act, Tenn. Code Ann. § 69-3-101 *et seq.*, and implementing regulations, Tenn. Comp. R. & Regs. § 1200-4-3-.03(1)(j) (listing PCE, VC, 1,1-DCE, *cis*-1,2-DCE, and *trans*-1,2-DCE as “toxic substances”).

42. The Safe Drinking Water Act provides for EPA to establish a maximum contaminant level goal (“MCLG”) and a maximum contaminant level (“MCL”) for certain contaminants in drinking water. EPA must set the MCLG at “the level at which no known or anticipated adverse effects on the health of persons occur and which allows an adequate margin of safety.” 42 U.S.C. § 300g-1(b)(4)(B). EPA must set the maximum contaminant level (“MCL”), directly enforceable against all public water systems regulated under the SDWA, at a level “which is as close to the [MCLG] as is feasible.” 42 U.S.C. § 300g-1(b)(4)(B); *see also id.* § 300g, 300g-1(a)-(b).

43. EPA has determined that there is no demonstrably safe level of TCE or PCE in drinking water. EPA therefore established MCLGs for TCE and PCE of zero (0). Based on considerations of feasibility, in 1987 EPA established MCLs for TCE and PCE of 5 ppb, or 0.005 milligrams per liter of water (“mg/L”). 40 C.F.R. §§ 141.50(a)(5) & (17), 141.61(a)(5) & (15).

44. The State of Tennessee has established limits of 5 ppb TCE and PCE for all waters used for “domestic water supply.” Tenn. Comp. R. & Regs. § 1200-4-3-.03-(1)(j).

45. EPA Region 4, the region that includes Tennessee, recommends use of screening levels of 1.7 ppb TCE and 0.11 ppb PCE in tap water; of 2.8 milligrams per kilogram (“mg/kg”) TCE and 0.57 mg/kg PCE in residential soil; and of 14 mg/kg TCE and 2.7 mg/kg PCE in industrial soil. In circumstances where TCE- or PCE-contaminated soils present a risk of contamination to underlying groundwater, EPA

Region 4 recommends use of soil screening levels of 0.00061 mg/kg for TCE and 0.000052 ppb for PCE.

46. EPA has determined that there is no demonstrably safe level of VC in drinking water. EPA therefore established an MCLG for VC of zero (0). Based on considerations of feasibility, EPA established an MCL for VC of 2 ppb. 40 C.F.R. §§ 141.50(a)(2), 141.61(a)(1).

47. EPA has established an MCLG and MCL of 7 ppb for 1,1-DCE. 40 C.F.R. §§ 141.50(b)(1), 141.61(a)(7).

48. EPA has established an MCLG and MCL of 70 ppb for *cis*-1,2-DCE. 40 C.F.R. §§ 141.50(b)(10), 141.61(a)(9).

49. EPA has established an MCLG and MCL of 100 ppb for *trans*-1,2-DCE. 40 C.F.R. §§ 141.50(b)(11), 141.61(a)(17).

**B. Defendants' Generation, Transportation, Disposal, and Management of TCE and PCE-Contaminated Waste at the Dickson County Landfill**

50. The Dickson Landfill is located in Dickson County two miles southwest of the City of Dickson's downtown, along Eno Road. The Landfill began operations as an unregulated dump in the mid 1900s and has been expanded several times.

51. For more than four decades, solid and/or hazardous wastes have been disposed at the Landfill. The wastes have included TCE and PCE. Beginning in the mid to late 1960s or early 1970s, for many years the wastes disposed at the Landfill included weekly trailer loads of drummed TCE and TCE- contaminated liquid wastes, sludges, and slurries from one or more local industrial facilities, as well as contaminated soil from cleanups of other facilities and sites. For many

years, and potentially beginning at least in the early 1970s, wastes disposed at the Landfill also included PCE and PCE-contaminated wastes.

52. Since 1985, A.L.P. has used aerosol cans containing TCE and PCE in its Dickson plant. Used aerosol cans often contain residual TCE and/or PCE even after the spray function ceases to work. One cause of this phenomenon is that aerosol propellant is often expended before the liquid contained in the aerosol spray can. A.L.P. disposed in the plant's general trash containers – including aerosol cans from which the aerosol propellant had been expended – that still contained TCE and PCE residues.

53. In approximately 1990, the A.L.P. facility purchased a can-puncturing device to drain spent aerosol cans before disposal. A.L.P. continued to dispose of the punctured and drained cans in the general trash. Such punctured and drained cans may have retained some residues of TCE and/or PCE. On information and belief, these punctured cans contained some TCE and PCE residues even after puncturing and draining.

54. Employees at A.L.P.'s facility in Dickson wore protective latex rubber gloves when handling solvents. A.L.P. disposed of these rubber gloves in the plant's general trash.

55. General trash from the A.L.P. plant, including trash containing TCE and PCE wastes, was transported to and disposed at the Dickson County Landfill. This disposal began, on information and belief, in 1985, and continued through at least 1996.

56. Interstate is in the printing business. Interstate has owned printing press equipment since at least 1970.

57. One process in which Interstate has used PCE is in making printing plates. Interstate may have used PCE and TCE in other operations. Interstate reported, on formal regulatory filings in the 1980s, that it began generating spent PCE waste in 1969 and continued to generate such waste at least until the later half of the 1980s.

58. Interstate purchased plate-making equipment in 1978 or earlier. Interstate used PCE in plate making with this equipment. Interstate purchased different print making equipment in approximately January 1997.

59. Interstate used at least 1000 gallons of PCE in 1983. Interstate reported to the State of Tennessee that it had 3500 kg of waste PCE on site on January 1, 1984. Interstate did not have on site on January 1, 1984 all PCE Interstate used in 1983 or before. Interstate disposed of PCE during 1983. Interstate has produced no records showing disposal of PCE in 1983 at an authorized facility. On information and believe, Interstate disposed of spent PCE and/or PCE-contaminated waste at the closest landfill, which was the Dickson Landfill, in 1983 and/or previous years.

60. Interstate used TCE in its operations prior to at least approximately 1996.

61. Interstate informed its insurer on May 1, 1984 that, in the past, it had disposed of its solvents “in a number of different ways” and had “most recently” paid

a company to haul the waste away to dispose of it at that company's liability. Prior to May 1, 1984, Interstate had disposed of some waste solvents by means other than paying a company to haul the waste away to dispose of it at that company's liability.

62. In 1984, Interstate acquired a reclaimer still for the recovery of solvents. Interstate used this reclaimer still to recover both alcohol-based and PCE-based solvents. Interstate processed these solvents through the same still.

63. In approximately August 1984, Interstate, through its consultant, commissioned a chemical analysis of still bottoms from reclamation of spent PCE; this analysis showed high concentrations of PCE. In approximately August 1984, Interstate, through its consultant, also commissioned a chemical analysis of still bottoms from recovery of ink still bottoms and found high concentrations of chlorine. Chlorine is a constituent of PCE and TCE. In April 1985, the Tennessee Department of Health and Environment corresponded with Interstate regarding "still bottoms resulting from distillation of the perchloethylene/alcohol mixture." In December 1985, Interstate was considering obtaining a second reclaimer still for the express purpose of keeping PCE and alcohol segregated. On information and belief, Interstate did not keep waste PCE and waste alcohol solvents segregated prior to at least December 1985. On information and belief, still bottoms from Interstate's reclamation of alcohol-based solvents were contaminated with PCE and/or TCE.

64. During at least the 1980s, Interstate disposed of "still bottoms" from solvent recovery at the Landfill. On October 23, 1984, Interstate, through its consultant, applied for permission to dispose of still bottoms as special waste at the

Landfill. Interstate's application for disposal of still bottoms at the Landfill was based on what it represented, through its consultant, to be "a composite sample of still bottoms from the backlog solvents being processed by Interstate Packaging." Interstate's October 1984 application to dispose of still bottoms at the Landfill did not specifically exclude PCE-contaminated still bottoms. Among the backlogged solvents at Interstate at that time were waste PCE solvents.

65. On October 31, 1985, the Tennessee Department of Health and Environment approved Interstate's request to dispose of still bottoms at the Landfill. Approximately six months later, on April 9, 1985, the Tennessee Department of Health and Environment notified Interstate that "still bottoms resulting from distillation of the perchloethylene/alcohol mixture must be treated as an F0002 hazardous waste. However, prior to April 9, 1985, Interstate employees had taken numerous truck loads of waste to the Dickson landfill, including drums and buckets. On information and belief, Interstate disposed of still bottoms contaminated with PCE and/or TCE at the Landfill at least prior to April 9, 1985.

66. Interstate's representatives and/or agents have repeatedly stated, including in Court filings, that Interstate used TCE. Interstate used TCE in its operations. Interstate has produced no documentation concerning disposal of TCE at any authorized facility. On information and belief, Interstate disposed of some or all of the TCE it used, with its other trash, at the Landfill.

67. In the 1980s, Interstate paid certain of its employees to dispose of waste at the Landfill. At least one of these employee disposed of drums and buckets at the Landfill in 1984.

68. During at least the 1980s, Dickson County Solid Waste Management serviced one or more waste dumpsters at the Interstate facility in White Bluff, Tennessee. During the 1980s, Dickson County Solid Waste Management disposed of waste at the Landfill.

69. At least until the early-1980s, it was common for many companies to dispose of industrial chemicals, including spent solvents, with their general trash. Companies disposed of spent solvents with their general trash because this disposal method was, at that time, cost effective. The economic factors that lead many companies to dispose of industrial chemicals, including spent solvents, with their trash applied to Interstate.

70. When Interstate's operations commenced in White Bluff, Tennessee, the Landfill was the most readily accessible public landfill to Interstate. The Landfill remained the most readily accessible public landfill to Interstate until at least such time as the Landfill ceased accepting industrial waste. Interstate disposed of trash, including some industrial waste, at the Landfill in the 1980s. On information and belief, Interstate disposed of its trash, including some industrial waste, at the Landfill in the 1970s through the 1990s.

71. On information and belief, Interstate disposed of PCE- and/or TCE-contaminated waste at the Landfill

72. The Nemak Foundry in Dickson began operating in September 1987. The Nemak Foundry was originally owned and operated by Teksid Aluminum Foundry, Inc. ("TAF"), and was acquired by Nemak in 2007. Nemak acquired all of TAF's liabilities, including liabilities that predated Nemak's acquisition of TAF.

73. Since 1987, the Nemak Foundry has used products containing PCE, including, without limitation, aerosol cans of brake cleaner. Brake cleaner in the aerosol cans was used to maintain brakes on tow-motors and on other miscellaneous equipment at the Nemak Foundry.

74. Nemak disposed spent aerosol cans of brake cleaner containing residual PCE in the general trash at the Nemak Foundry from 1987 to at least 2007. General trash from the Nemak Foundry, including trash containing PCE wastes, was transported to and disposed at the Dickson Landfill from 1987 to at least 1996.

75. The operator(s) of the Landfill have, and at all time during their operation of the Landfill had, discretion to decide not to accept certain types of wastes for disposal at the Landfill. Until approximately 1990, the Landfill accepted hazardous and industrial wastes for disposal without regard to physical state or disposal container design. The Landfill continued to accept liquid and industrial wastes and other wastes requiring special handling for disposal in some circumstances until at least late 1996.

76. At least some areas of the Landfill used to dispose industrial wastes and other solid and hazardous wastes, including wastes containing TCE and/or

PCE, were left exposed to the elements for many years. For example, waste drums were visible on the surface of the Landfill as late as 1991. Exposure of this waste to the elements, including rainwater, contributed to the TCE and PCE contamination of landfill leachate and to contamination of underlying soil, groundwater, and bedrock with TCE, PCE, and those chemicals' degradation products.

77. Areas of the Landfill used to dispose industrial wastes and other solid and hazardous wastes, including wastes containing TCE and PCE, were and remain unlined. No barrier separates these wastes from the underlying soil, groundwater, and bedrock. Shallow leachate collection lines have been installed in portions of the Landfill. Some of these shallow leachate collection lines have been installed only in the last decade. Leachate collection lines do not presently cover, and never have covered, the entire Landfill area. These conditions have contributed to the migration of TCE and PCE contamination to underlying soil, groundwater, and bedrock.

78. Surface outbreaks of leachate from the Landfill were identified as early as 1983 and continued through at least the 1990s. In 1995, consultants to the County estimated that the Landfill was generating leachate at a rate of five hundred thousand gallons per acre per year.

79. Defendants are not presently extracting groundwater from under the landfill at any depth greater than the existing, shallow leachate collection lines. Defendants have not taken action, such as groundwater pumping, that contains

contamination at these deeper depths or prevents the spread of that contamination into and through the groundwater of Dickson County.

**C. TCE, PCE, and Degradation Product Contamination at and from the Landfill**

80. Contamination from wastes disposed at the Landfill, including TCE and PCE, has been spreading through surrounding groundwater, surface water, and soil for many years. TCE and degradation products of TCE and PCE have been found in soil and groundwater several hundred feet beneath the Landfill and in wells and springs as far as two to three miles away. Uncontained TCE contamination has been detected in wells and springs surrounding the Landfill since 1988, and has been found in springs that flow to waters used for public water supplies, fishing, irrigation, livestock watering, and wildlife habitat as recently as June 2009. Some PCE disposed at the Landfill has degraded into TCE, contributing to the total mass of TCE in the groundwater contaminated by the Landfill. This contamination has rendered, and continues to render, some groundwater and surface water unfit for domestic use. This contamination threatens drinking water sources and potential drinking water sources for thousands of City and County residents, including the Holts and members of NRDC.

81. In 1988, TCE was detected in a water sample from the Holt well, which is installed at a depth of 340 feet, and lies approximately 300 feet east of the Landfill. That same year, TDEC determined that contamination from the Landfill could be reaching Bruce Spring, approximately 2.5 miles to the southwest of the Landfill.

82. Monitoring wells were not installed at the Landfill until 1989, and samples from wells at the Landfill were not regularly tested for VOCs until approximately 1994.

83. Subsequent groundwater samples taken from wells at the Landfill have indicated the presence of TCE, PCE and these chemicals' degradation products, including *cis*-1,2-DCE and VC, at concentrations many times the Maximum Contaminant Levels ("MCLs") and Maximum Contaminant Level Goals ("MCLGs") that EPA has established for these chemicals. For example:

- a. TCE has been found in groundwater samples from monitoring well MW-DS, on the Landfill property, at concentrations far in excess of the MCLG and at least ten thousand times the MCL for TCE. All thirty-five known quarterly samples taken by the County's environmental consultants from MW-DS between April 2003 and June 2009 have shown TCE at concentrations that far exceed the MCLG and that exceed the MCL by at least one thousand times.
- b. TCE has also been detected in groundwater samples from well MW-DD, on the Landfill property, at concentrations of at least one thousand times the MCLG and MCL; in samples from well DK-9, on the Landfill property, at concentrations of at least five times the MCLG and MCL; and in samples from monitoring well MW-1A, on the Landfill property, at concentrations above the MCLG and MCL.

- c. PCE has been detected in groundwater samples from well MW-DS and MW-DD. In some samples from well MW-DS, PCE has been present in concentrations far in excess of the MCLG and more than fifteen times the MCL for PCE.
- d. The chemical 1,1-DCE, a degradation product of TCE and PCE, has been found in groundwater wells MW-DS and MW-DD at concentrations that exceed the MCLG and MCL for 1,1-DCE.
- e. The chemical *cis*-1,2-DCE, a degradation product of TCE and PCE, has been found in groundwater from well MW-DS at concentrations at least 150 times the MCLG and MCL for *cis*-1,2-DCE and is consistently found at concentrations of greater than 75 times the MCLG and MCL. Groundwater sampling from well MW-DD has also indicated the presence of *cis*-1,2-DCE at a concentration at least fifty times the MCLG and MCL.
- f. Groundwater samples from well MW-DD and MW-DS have indicated the presence of *trans*-1,2-DCE, another degradation product of TCE and PCE.
- g. Groundwater samples from well MW-DS have indicated the presence of VC at concentrations at least three hundred times the MCL for that contaminant. More than thirty of the thirty-five quarterly samples taken by Dickson County's environmental consultants at MW-DS since April 2003 have revealed VC in concentrations at least 100 times the

MCL for VC. Groundwater samples from well MW-DD have also indicated the presence of VC at levels of at least forty times the MCL.

84. The quarterly to biannual monitoring currently conducted by the County's consultants at the Landfill and some area wells and springs does not include the taking of soil samples. On information and belief, there has been no regular sampling of soil contamination at or around the Landfill. However, TCE and PCE have been found at levels above EPA standards in soil samples that have been taken. For example, an analysis of soils extracted from beneath the Landfill during the installation of well MW-DD in 2002 revealed TCE at concentrations of at least 41.4 mg/kg. A concentration of 41.4 mg/kg TCE is nearly seventy-thousand times EPA Region 4's recommended risk-based screening level for TCE contamination in soil that threatens underlying groundwater. The same 2002 soil analysis revealed PCE concentrations of at least 0.0167 mg/kg. A concentration of 0.0167 mg/kg PCE is more than three hundred times EPA Region 4's recommended risk-based screening level for PCE contamination in soil that threatens underlying groundwater.

**D. The Spread of TCE, PCE and Related Contamination from the Landfill**

85. The Landfill is situated on a local rise in a region of rolling hills and valleys, at a surface elevation of approximately 850 feet above sea level. The lands underlying and surrounding the Landfill are dominated by karst geology, which is characterized by underground rock that contains numerous fractures, caves and voids. The fractures, joints, and other openings in the bedrock can facilitate rapid

migration of contaminants, such as TCE and PCE. The irregular surface of the bedrock can facilitate pooling of DNAPLs, such as TCE and PCE.

86. Surface water drains from the Landfill in several directions, including to the south, southwest, west, northwest. Surface water drains to the southwest, west, and northwest of the Landfill to unnamed tributaries of the Worley Furnace Branch creek, and from there to the Worley Furnace Branch creek, which flows into the West Piney River at a point less than two miles from the Landfill. Water also drains southwest from the Landfill to Baker Branch creek, which in turn flows into the West Piney River at a point less than two miles from the Landfill. Water also drains north from the Landfill to a small wetland area.

87. Groundwater flows from the Landfill in many directions.

88. The groundwater underlying the Landfill influences numerous springs and wells around the Landfill, including the Harry Holt, Lavenia Holt and Roy Holt private wells to the east and southeast; municipal well DK-21 to the east-northeast; Sullivan Spring to the northwest; and Bruce Spring and the L. Donegan B. LaRose, and M. Pierce wells to the southwest, and potentially the Baggett well to the northeast and the G. Work well to the west.

89. At least eleven area wells and springs, outside the Landfill, are already known to be contaminated with TCE and/or *cis*-1,2-DCE from the Landfill. Some of these wells and/or springs are nearly three miles from the Landfill. For example:

- a. Sullivan Spring is contaminated with TCE and *cis*-1,2-DCE. Sullivan Spring lies about one-third of a mile northwest of the Landfill and flows into the Worley Furnace Branch creek less than two miles upstream of the confluence of the Worley Furnace Branch creek and the West Piney River. At least forty-eight samples taken at Sullivan Spring since March 1994 have revealed the presence of TCE. At least forty-three of those samples have revealed TCE at levels above the MCL, and in at least two samples, TCE concentrations have exceeded the MCL by more than forty times.
- b. Bruce Spring is contaminated with TCE and *cis*-1,2-DCE. Bruce Spring is located immediately across Bruce Road from the West Piney River, approximately 2.5 miles southwest of the Landfill. Water from Bruce Spring drains through a short channel and culvert directly into the West Piney River, upstream of the confluence with the East Piney River. Twenty-five samples taken from Bruce Spring and reported by Dickson County's environmental consultant since October 2003 have revealed TCE contamination, and at least twenty-three of these samples have revealed TCE in concentrations above the MCL. At least eighteen of twenty-two quarterly samples taken from Bruce Spring by Dickson County's environmental consultant during this time also revealed *cis*-1,2-DCE.

- c. The Harry Holt well, which lies fewer than 300 feet to the east of the Landfill, is contaminated with TCE and *cis*-1,2-DCE. At least twelve samples taken from the Harry Holt well since October 1988 have revealed the presence of TCE. At least nine of those twelve samples revealed TCE contamination in concentrations above the MCL. At least nine samples taken from the Harry Holt well since October 1988 have also revealed DCE contamination.
- d. The Roy Holt well, which lies fewer than 500 feet to the east of the Landfill, is contaminated with TCE and *cis*-1,2-DCE. At least six samples taken from the Roy Holt well from November 2000 to April 2003 (when sampling at this well ceased) revealed TCE concentrations at least three times higher than the MCL. At least three of the samples taken during this time period also revealed *cis*-1,2-DCE.
- e. The Lavenia Holt well, which lies fewer than 500 feet to the southeast of the Landfill, is contaminated with TCE.
- f. In 1996, TCE was detected in water samples taken from municipal well DK-21, one-third of a mile east-northeast of the Landfill. TCE was again detected in water samples from well DK-21 in 1997.
- g. TCE has been found in other area wells affected by groundwater contamination from the Landfill. TCE concentrations nearly three times the MCL, or higher, have been detected in the G. Work well, which is located approximately two miles southwest of the Landfill.

TCE has been found at a concentration over the MCL in the Baggett well, which is located less than a mile northeast of the Landfill. TCE has also been found in the L. Donegan, L. Gorley, B. LaRose, and M. Pierce wells, which are located approximately 1.5 miles south-southwest of the Landfill, and found at concentrations above the MCL in the L. Donegan, B. LaRose, and M. Pierce wells. The L. Donegan, M. Pierce, and B. LaRose wells have been found to be contaminated with *cis*-1,2-DCE, in addition to TCE.

90. Surface waters in the vicinity of the Landfill have also been contaminated with TCE and TCE and PCE degradation products. TCE has been detected in the West Piney River at concentrations above the MCL. *Cis*-1,2-DCE has been detected in the West Piney River and in water sampled from a ditch south of the Landfill.

91. By late 1995, the Dickson Water Department had concluded, in an assessment approved by TDEC, that Dickson's groundwater-fed drinking water sources were "highly susceptible" to contamination from the Landfill.

92. In May 2003, TDEC informed the County that groundwater in the enlarged fractures beneath the Landfill had "a high potential for communicating with drinking water wells in the surrounding area."

93. An October 2003 draft site assessment report and proposal commissioned by TDEC and funded by the Tennessee Department of Transportation found that "due to the complex groundwater flow patterns

associated with [the] type of fractured bedrock aquifer” underlying the Landfill, groundwater assessment efforts should be expanded to include wells and springs out to at least a 3-mile radius around the Landfill, and that wells within a broader radius be considered for future sampling based on the results of the initial assessment.

94. A March 2004 site assessment by a consultant to EPA (“EPA Report”) concluded both that the Landfill was contaminating groundwater with TCE and other pollutants, and that the extent of the contamination had yet to be characterized fully, in part because previous investigations had “been too limited in scope or did not fully account for the hydrologic setting.” The EPA Report called for a “comprehensive and well-planned hydrogeologic investigation” of both soil and groundwater contamination “in the deeper residuum immediately around the Landfill,” in order to establish the extent of that contamination and the potential for migration into the underlying bedrock. The EPA Report also called for investigation of groundwater contamination in the bedrock and at drainage points beyond recently constructed monitoring wells, including to the southwest. The EPA Report further noted that contamination from the Landfill may have reached areas that had yet to be identified and studied.

95. In August 2004, the County acknowledged that the residents of certain lands extending short distances north, west and east of the Landfill, and several miles southwest of the Landfill to the West Piney River, faced an “imminent threat” of exposure to groundwater contamination from the Landfill. In January 2007, the

County adopted regulations that include these lands within an “environmental risk area” that the County has recognized as “having the highest potential risk” of contamination from the Landfill (“County-identified imminent threat area”).

96. TCE contamination has been found in at least one well located on the west side of the West Piney River and outside the County-identified imminent threat area. TCE contamination has also been found in at least one well located to the northeast of the Landfill and outside the County-identified imminent threat area. Contamination with TCE, PCE, 1,1-DCE, *cis*-1,2-DCE, *trans*-1,2-DCE and/or VC has also been found in wells, including well MW-DD and the Harry Holt well, that draw from deep groundwater.

97. The full present extent of contamination and spread of TCE, PCE and these chemicals’ degradation products in the groundwater, surface water, soil, and air at and surrounding the Landfill remain unknown. Defendants have not conducted adequate ongoing sampling of the wells, springs, creeks, rivers, soils, and air to characterize fully the spread of contamination through and from the Landfill property.

98. What sampling data have been collected and/or reported by the County’s environmental consultants over the past decade indicate that levels of TCE, PCE and these chemicals’ degradation products in the groundwater contaminated by the Landfill have not decreased. In some instances, the contamination of Dickson County groundwater and surface water appears to be worsening. For example:

- a. For several years prior to April 1997, the concentrations of TCE in Sullivan Spring reported by the County's environmental consultants generally did not exceed 85 ppb. Since that time, most samples from Sullivan Spring have been contaminated with TCE in concentrations above 85 ppb. At least twenty samples since April 1997, including quarterly samples taken in March, June, and September 2007, were contaminated with TCE in concentrations above 100 ppb.
- b. Concentrations of TCE in Bruce Spring were reported by the County's environmental consultants to be at or below 10 ppb in all but one quarterly sample taken between November 2004 and June 2006. Since that time, concentrations of TCE found in samples taken from Bruce Spring have generally increased. Since June 2006, eight of eleven samples taken at this site have shown TCE in concentrations of at least 10 ppb, twice the MCL, and one sample has shown TCE at a concentration more than triple the MCL.
- c. Concentrations of TCE in the M. Pierce well have increased in all but one quarterly sample taken by the County's consultants between December 2005 and June 2009. The consultants' June 2009 sampling results indicate that the well has become contaminated with *cis*-1,2-DCE, which had not been detected in previous sampling events, and that TCE contamination in the well has increased to a level twice the MCL for TCE.

99. The spread of contamination of TCE, PCE and these chemicals' degradation products from the Landfill continues to render traditional drinking water supplies unfit for human consumption, continues to spread through the groundwater and surface water of Dickson County, and for these and other reasons, may present an imminent and substantial endangerment to health, the environment, or both.

**E. Endangerment of Private Drinking Water Wells and Springs**

100. Contamination with TCE, PCE and these chemicals' degradation products from the Landfill has rendered underlying and hydrologically interconnected groundwater unfit for human consumption and other domestic use. TCE and TCE and PCE degradation product contamination has also reached springs and other surface waters, making those waters unfit for human consumption and other domestic uses.

101. Thousands of City and County residents have traditionally relied on groundwater-fed private wells and springs for drinking, cooking, bathing, gardening, and other domestic needs. In 1992, EPA estimated that approximately 500 people within a mile of the Landfill, and 1700 people within four miles of the Landfill, were using groundwater for drinking water.

102. Dickson County households who wish to connect to public water supplies are typically charged a "hookup" fee to connect to public water lines, followed by monthly fees. For certain households in the vicinity of the Landfill, these costs may be prohibitive. Despite the recent extension of public water system

lines along certain roads within the County-identified imminent threat area, on information and belief, some households within that area have not connected to public water supplies and continue to use private wells fed by groundwater for drinking and other domestic uses. Many persons who live outside the County-identified imminent threat area, including some NRDC members, also continue to use private wells fed by groundwater for drinking and other domestic uses. Some of these private wells may be threatened with contamination by TCE, PCE and/or these chemicals' degradation products at present or as the contamination spreads. Defendants are not conducting sampling necessary to characterize the ongoing spread of this contamination.

**F. Endangerment of Other Drinking Water Supplies**

103. Contamination from the Landfill may threaten the public water supplies for the City, County, and surrounding communities.

104. In the past, well DK-21 has been used as a source of public drinking water for residents of the City of Dickson and surrounding communities. Well DK-21 lies approximately one-third of a mile east-northeast of the Landfill and is known to be contaminated with TCE. Well DK-21 can no longer safely be used to supply drinking water due to this contamination.

105. The Water Authority of Dickson County ("Water Authority") is an agency that directly and/or indirectly supplies water for domestic use to residents of the City of Dickson, most of Dickson County, and portions of the neighboring

Hickman, Cheatham, Humphreys, and Williamson Counties. The Holts presently receive water deliveries from the Water Authority.

106. The Water Authority presently draws its water supplies from sources including the West Piney River. On any given day, the West Piney River may supply up to two million gallons of the Water Authority's approximately five to six million gallon daily demand. The West Piney River intake for the Water Authority's water system is located on the West Piney River, immediately upstream of the West Piney River's confluence with the East Piney River, and southwest of the Landfill.

107. Contamination from the Landfill extends in the direction of the West Piney River. Springs and creeks influenced by surface and/or groundwater from the Landfill flow into the West Piney River upstream of the water intake for the Water Authority. These springs and creeks include Bruce Spring, which flows into the West Piney River upstream and within two miles of the Water Authority's water intake; Sullivan Spring, which flows into the Worley Furnace Branch creek tributary to the West Piney River at a point about six miles upstream of the Water Authority's water intake; and Baker Branch creek, which collects runoff from the Landfill before flowing into the West Piney River upstream of the Water Authority's water intake. TCE has repeatedly been found in Bruce Spring at levels nearly three times the MCL, and at least eight times EPA Region 4's recommended screening level for TCE in tap water. TCE has repeatedly been found in Sullivan Spring at levels at least forty times the MCL, and at least one hundred times EPA Region 4's

recommended screening level for TCE in tap water. TCE has also been found in the West Piney River, in the vicinity of Bruce Spring, at levels above the MCL and at least four times EPA Region 4's recommended screening level for TCE in tap water.

108. TCE has in the past been detected in finished water delivered to residents of the City of Dickson.

109. The Water Authority occasionally samples its finished water for VOCs, including TCE, PCE, 1,1-DCE, *cis*-1,2-DCE, and *trans*-1,2-DCE. The Water Authority samples for these VOCs no more than four times per year, and sometimes less frequently. This sampling regimen cannot reliably detect VOCs that are present, but not continuously or evenly distributed, in the public water system.

110. The MCLG for TCE, PCE and VC is zero (0). On information and belief, the detection limits of the analytic methods and lab analyses used by the Water Authority to detect TCE, PCE and VC exceed the MCLG for these contaminants, making it impossible for the Water Authority to reliably detect TCE, PCE and VC that are present in finished water supplies above the MCLG. The MCLG is the concentration at which EPA has determined no known or anticipated adverse effects on the health of persons occur, with an adequate margin of safety.

111. According to the March 2004 EPA report, until approximately 1999, the former City of Dickson Water Department drinking water treatment and distribution facilities now operated by the Water Authority had no treatment capability designed to remove VOCs from the water supply. An aeration device was installed in 1999 and operated for a brief period in March 2000, but no samples

were taken during this period to test the system's ability to remove TCE or other VOCs from drinking water. On information and belief, the Water Authority's water treatment facilities do not have proven capacity to remove TCE, PCE or other VOCs from public water supplies.

**G. Endangerment of Waters Used for Fishing and Recreation, Agriculture, and Wildlife**

112. The State of Tennessee has established limits of 5 ppb TCE and PCE for all waters used for domestic water supply as well as for recreation (including fishing), irrigation, livestock watering, and/or habitat for fish, aquatic life, or wildlife. Tenn. Comp. R. & Regs. § 1200-4-3-.03(1)(j); *id.* § 1200-4-3-.02(5).

113. Both the West Piney River and its Worley Furnace Branch creek tributary are or have been used for recreational fishing. The State of Tennessee has recognized these waters' recreational and habitat value by designating the Piney River, which originates at the confluence of the West and East Piney Rivers, a "naturally reproducing trout stream." Tenn. Comp. R. & Regs. § 1200-4-4; *id.* § 1200-4-4-.05.

114. TCE has been detected at Sullivan Spring, which flows into the Worley Furnace Branch creek and from there into the West Piney River, at levels over forty times the maximum of 5 ppb TCE for waters used for domestic water supply as well as for recreation, irrigation, livestock watering, and/or habitat for fish, aquatic life, or wildlife, and at least one hundred times EPA Region 4's recommended screening level for TCE in tap water

115. TCE has been detected at Bruce Spring, which flows into the West Piney River, at levels nearly three times the maximum of 5 ppb TCE for waters used for domestic water supply as well as for recreation, irrigation, livestock watering, and/or habitat for fish, aquatic life, or wildlife, and at least eight times EPA Region 4's recommended screening level for TCE in tap water

116. TCE has been detected in the West Piney River near Bruce Spring at levels above the maximum of 5 ppb TCE for waters used for domestic water supply as well as for recreation, irrigation, livestock watering, and/or habitat for fish, aquatic life, or wildlife.

117. The State of Tennessee generally prohibits TCE, PCE, 1,1-DCE, *cis*-1,2-DCE, *trans*-1,2-DCE, and VC in its surface waters, and in groundwater that discharges to surface waters, at any levels that would render those waters unsafe or unsuitable for fishing or other water contact recreation; adversely affect the quality of those waters for irrigation or livestock watering, or for wildlife; and/or harm fish and aquatic life. Tenn. Comp. R. & Regs. §§ 1200-4-3-.03(1)(j); 1200-4-3-.03(4)(j); 1200-4-3-.03(5)(f); 1200-4-3-.03(6)(f); 1200-4-3-.03(3)(g).

118. The lands surrounding the Landfill include a number of small farms that rely on water from private wells, and/or from the West Piney River and its tributaries, for irrigation or livestock watering. These sources of water may be threatened with TCE, PCE, and/or degradation product contamination from the Landfill in concentrations that exceed levels permitted by EPA and the State of Tennessee.

## **H. Defendants' Failure to Remedy Landfill Contamination**

119. Today, some two decades after the discovery of TCE in the Harry Holt well, Defendants have failed to assess fully, let alone to remediate, the threats to health and the environment posed by contamination from the Dickson Landfill.

120. Defendants have not determined how far, how widely, or how deep TCE, PCE and these chemicals' degradation products have presently spread from the Landfill through the soils, surface waters, and groundwater.

121. Defendants have never determined how much farther, or at what rate, TCE, PCE and these chemicals' degradation products can be expected to migrate away from the Landfill.

122. Defendants have not carried out a sampling plan adequate to determine how many residents of the City, County, and surrounding areas are presently threatened or may in the future be threatened by contamination of groundwater, surface water, or soils due to the spread of TCE, PCE and these chemicals' degradation products from the Landfill.

123. Defendants have never determined what fish, livestock, wildlife, recreational waters, and other natural resources are threatened by contamination from the Landfill.

## **LEGAL BACKGROUND**

124. RCRA provides for comprehensive regulation of solid and hazardous wastes to prevent threats to human health and the environment. In enacting RCRA, Congress recognized that "disposal of solid waste and hazardous waste in or

on the land without careful planning and management can present a danger to human health and the environment,” and that inadequate control of hazardous waste management in particular “will result in substantial risks to human health and the environment.” 42 U.S.C. § 6901(b)(2), (b)(5). Congress declared that hazardous waste “should be treated, stored or disposed of so as to minimize the present and future threat to human health and the environment,” *id.* § 6902(b); *see also id.* § 6902(a)(3) (establishing the statutory purpose of “prohibiting future open dumping on the land and requiring the conversion of existing open dumps to facilities which do not pose a danger to the environment or to health”), *id.* § 6902(a)(4) (establishing the statutory purpose of “assuring that hazardous waste management practices are conducted in a manner which protects human health and the environment”).

125. In 1984, Congress amended RCRA to allow private persons to bring suit to abate certain hazards caused by the mismanagement of solid or hazardous waste. Specifically, section 7002(a)(1)(B) of RCRA, added to RCRA by the Hazardous and Solid Waste Amendments of 1984, P.L. 98-616, 98 Stat. 3221, Title IV, § 401, and codified at 42 U.S.C. § 6972(a)(1)(B), authorizes private persons to commence civil actions

against any person, . . . including any past or present generator, past or present transporter, or past or present owner or operator of a treatment, storage, or disposal facility, who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment.

42 U.S.C.A. § 6972(a)(1)(B).

126. Liability under this provision is joint, several, and strict.

### **PROCEDURAL BACKGROUND**

127. Federal and state regulators have not acted to restrain or abate the acts or conditions which may have contributed or may be contributing to the Landfill's endangerment of human health and the environment.

128. EPA has not conducted any clean up or remediation of contamination at the Dickson landfill. EPA has not issued any administrative order to require clean up or remediation of the Dickson landfill. EPA has not initiated any litigation to require clean up or remediation of the Dickson landfill.

129. EPA has not commenced, and is not diligently prosecuting, an action under RCRA § 7003, 42 U.S.C. § 6973, that concerns the Landfill.

130. EPA has not commenced, and is not diligently prosecuting, an action under section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA"), 42 U.S.C. § 9606, that concerns the Landfill.

131. EPA is not actually engaging, and has not actually engaged, in a removal action under section 104 of CERCLA, 42 U.S.C. § 9604, that concerns the Landfill.

132. EPA has not incurred costs to initiate a Remedial Investigation and Feasibility Study under section 104 of CERCLA, 42 U.S.C. § 9604, that concerns the Landfill.

133. EPA is not diligently proceeding with a remedial action under CERCLA, 42 U.S.C. § 9601 *et seq.*, that concerns the Landfill.

134. EPA has not obtained a court order, or issued an administrative order, under RCRA § 7003, 42 U.S.C. § 6973, pursuant to which any of Defendants or any other responsible party is diligently conducting a removal action, Remedial Investigation and Feasibility Study, or any remedial action that concerns the Landfill.

135. EPA has not obtained a court order, or issued an administrative order, under section 106 of CERCLA, 42 U.S.C. § 9606, pursuant to which any of Defendants or any other responsible party is diligently conducting a removal action, Remedial Investigation and Feasibility Study, or remedial action that concerns the Landfill.

136. The State of Tennessee has not commenced an action in court to require cleanup or remediation of the Landfill.

137. The State of Tennessee has not itself conducted any cleanup or remediation at the Landfill.

138. The State of Tennessee has not taken any action under CERCLA with respect to the Landfill.

139. In 2001, TDEC issued the County a “Commissioner’s Order,” concerning the Landfill, under Tenn. Code Ann. § 68-211-112. The TDEC Commissioner’s Order was not issued pursuant to any authority of RCRA or the Comprehensive Environmental Response, Compensation and Liability Act of 1980

(“CERCLA”), 42 U.S.C. § 6901 *et seq.* TDEC has not contracted with EPA or the President of the United States to exercise the United States’ authority under CERCLA with respect to the Landfill.

140. The County did not complete actions required by the Commissioner’s Order. TDEC has not required the County to comply with the Commissioner’s Order.

141. Neither the State of Tennessee, nor any of its instrumentalities, nor Defendants have conducted a baseline risk assessment to characterize the current and potential threats to human health and the environment that may be posed by contaminants, from the Landfill, migrating to ground or surface water, leaching through the soil, remaining in the soil, and bioaccumulating in the food chain. Neither the State of Tennessee, nor any of its instrumentalities, nor Defendants have conducted an assessment of environmental risks (including risks to fish and wildlife) exposed to contaminants from the Landfill.

142. Neither the State of Tennessee, nor any of its instrumentalities, nor Defendants have developed a range of alternatives for treating sources of contamination at and underlying the Landfill. Neither the State of Tennessee, nor any of its instrumentalities, nor Defendants have developed a range of alternatives to reduce the toxicity, mobility or volume of sources of contamination at and underlying the Landfill. Neither the State of Tennessee, nor any of its instrumentalities, nor Defendants have identified “applicable or relevant and appropriate requirements,” as that phrase is used in CERCLA’s implementing

regulations and guidance, for remediation of contamination associated with the Landfill. Neither the State of Tennessee, nor any of its instrumentalities, nor Defendants have identified any alternatives that would meet “applicable or relevant and appropriate requirements,” as that phrase is used in CERCLA’s implementing regulations and guidance, for remediation of contamination associated with the Landfill.

143. Neither the State of Tennessee, nor any of its instrumentalities, nor Defendants have taken action that reduces groundwater contaminated associated with the Landfill to a point that that the groundwater can again be used for human consumption and other beneficial uses.

144. Neither the State of Tennessee, nor any of its instrumentalities, nor Defendants have extracted contaminated groundwater underlying the Landfill in such a manner as to stop migration of such contaminated groundwater away from the Landfill.

145. The State of Tennessee has not commenced, and is not diligently prosecuting, any action under RCRA § 7002(a)(1)(B), 42 U.S.C. § 6972(a)(1)(B), that concerns the Landfill.

146. The State of Tennessee is not actually engaging in a removal action under CERCLA § 104, 42 U.S.C. § 9604, that concerns the Landfill.

147. The State of Tennessee has not incurred costs to initiate a Remedial Investigation and Feasibility Study under CERCLA § 104, 42 U.S.C. § 9604, that concerns the Landfill.

148. The State of Tennessee is not diligently proceeding with any remedial action under CERCLA that concerns the Landfill.

### **CLAIM FOR RELIEF**

#### **Defendants Have Violated RCRA by Contributing to the Handling, Storage, Treatment, Transportation, and/or Disposal of Solid and Hazardous Waste Which Presents, or May Present, an Imminent and Substantial Endangerment to Health or the Environment**

149. Plaintiffs reallege and incorporate the allegations of all the preceding paragraphs of this Complaint as if fully set forth herein.

150. Solid and hazardous wastes including TCE, PCE and wastes contaminated with TCE and/or PCE have been disposed at the Dickson County Landfill since at least the late 1960s.

151. Contamination from solid and hazardous wastes known to have been disposed at the Landfill, including TCE and PCE, has been spreading through surrounding groundwater, surface water, and soil for decades. This uncontained contamination, which has repeatedly been detected in wells and springs surrounding the Landfill since 1988, and has been found in springs that flow to waters used for public and private residential water supplies, fishing, irrigation, livestock watering, and wildlife habitat as recently as summer 2009, may present an imminent and substantial endangerment to human health and the environment.

152. The County, a political subdivision of the State of Tennessee, is a “person” for purposes of RCRA. 42 U.S.C. § 6903(15). The County, through its ownership and operation of the Landfill, has contributed and is contributing to the handling, storage, treatment, transportation and/or disposal of solid or hazardous

waste which may present an imminent and substantial endangerment to health or the environment within the meaning of section 7002(a)(1)(B) of RCRA, 42 U.S.C. § 6972(a)(1)(B).

153. The City, a municipality within the State of Tennessee, is a “person” for purposes of RCRA. 42 U.S.C. § 6903(15). The City, through its ownership and operation of the Landfill, has contributed and is contributing to the handling, storage, treatment, transportation and/or disposal of solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment within the meaning of section 7002(a)(1)(B) of RCRA, 42 U.S.C. § 6972(a)(1)(B).

154. A.L.P. is a “person” for purposes of RCRA. 42 U.S.C. § 6903(15). A.L.P, through its generation of TCE and PCE wastes and disposal of those wastes at the Landfill, has contributed and is contributing to the handling, storage, treatment, transportation and/or disposal of solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment within the meaning of section 7002(a)(1)(B) of RCRA, 42 U.S.C. § 6972(a)(1)(B).

155. Interstate is a “person” for purposes of RCRA. 42 U.S.C. § 6903(15). Interstate, through its generation of PCE and TCE wastes and disposal of those wastes at the Landfill, has contributed to the handling, storage, treatment, transportation and/or disposal of solid or hazardous waste which may present an imminent and substantial endangerment to health or environment within the meaning of section 7002(a)(1)(B) of RCRA, 42 USC § 6972(a)(1)(B).

156. Nemak is a “person” for purposes of RCRA. 42 U.S.C. § 6903(15).

Nemak, through its generation of PCE wastes and disposal of those wastes at the Landfill, has contributed to the handling, storage, treatment, transportation and/or disposal of solid or hazardous waste which may present an imminent and substantial endangerment to health or environment within the meaning of section 7002(a)(1)(B) of RCRA, 42 USC § 6972(a)(1)(B).

157. The Holts and members of NRDC will suffer irreparable harm unless Defendants prepare a comprehensive site evaluation that determines the present and likely future extent of contamination from the Landfill in groundwater, surface water, soil and air and the associated threat to health and the environment, and act to eliminate that threat by removing, containing, treating or otherwise remediating the contamination.

158. Plaintiffs have no adequate remedy at law.

### **PRAYER FOR RELIEF**

Plaintiffs request that this Court enter a judgment that:

- (1) Declares that Defendants have contributed and/or are contributing to the past and/or present handling, storage, treatment, transportation, and/or disposal of solid or hazardous waste containing TCE and/or PCE at the Dickson County Landfill that may present an imminent and substantial endangerment to health and the environment;
- (2) Orders Defendants to:

- a. Investigate the present extent of TCE, PCE and TCE and PCE degradation product contamination from the Landfill in the soil, surface water, and groundwater of Dickson County;
- b. Investigate and project the expected future spread of TCE, PCE and/or TCE or PCE degradation product contamination from the Landfill;
- c. Characterize the endangerment posed by TCE, PCE and TCE and PCE degradation product contamination or threatened contamination from the Landfill to soils, surface waters, groundwater, and other environmental media and natural resources;
- d. Remediate present TCE, PCE and TCE and PCE degradation product contamination from the Landfill;
- e. Abate the threat of TCE, PCE and TCE and PCE degradation product contamination from the Landfill; and
- f. Take any additional actions that may be necessary to remedy the endangerment to health and/or the environment from TCE, PCE and TCE and PCE degradation product contamination associated with the Landfill;

(3) Orders Defendants to pay Plaintiffs' reasonable attorneys' fees, expert witness fees, and costs incurred in prosecuting this action, pursuant to 28 U.S.C. § 2412 and 42 U.S.C. § 6972(e); and

(4) Orders such other and further relief as the Court may deem just and proper.

October 28, 2009

Respectfully submitted,

/s/ Michael E. Wall

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## **CERTIFICATE OF SERVICE**

I, Michael E. Wall, hereby certify that on October 28, 2009, I caused the following document:

### **FIRST AMENDED COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF**

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